

How to investigate and fix filesize and CRC mismatches

- Connect to fcdfsam2 as sam:

```
$ ssh sam@fcdfsam2
```

- Run the script to find current filesize and CRC mismatches. This reads in the corresponding `.sql` file and takes about 8 minutes to run:

```
$ source list_file_size_and_CRC_incorrect
```

- The result will be two lists of file names
 - The first list is files with filesize mismatches
 - The second list is files with CRC mismatches
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- Get the dataset to which each file belongs:
 - Think of the file name as characters in an array with the first character at index [0]
 - Indices [0] and [1] should always be letters. Index [8] should always be a “.”. Indices [13] through [16] should also always be letters.
 - The dataset name is then the sequence of characters at the following indices: [0][13][14][15][16][1]
 - Example: file name bm0400d5.0369helb belongs to dataset “bhelbm”
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- Look up the “Contact person identifier” for each problem dataset using the DB Browser
 - Go to the DB Browser at <http://cdfdbb.fnal.gov:8520/cdfr2/databases>
 - Scroll down the page and click on [Select this link to view outline of reports.](#)
 - Under “Data Catalog”, click on [SAM Datasets' Registry Entries with Genealogy](#)
 - In the “data set identifier” box, enter the problem dataset name and the result will include the contact
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- Send an email to the contact describing the problem and asking for investigation. Include:
 - The dataset name and all corresponding files
 - Whether the error is filesize, or CRC, or both.
 - List of possible actions
 - Correct the SAM DB entry to match the Enstore entry, then retire the file(s)
 - Correct the SAM DB entry to match the Enstore entry, then declare the file(s) “bad”
 - Delete the file(s)
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- If you need to correct the SAM DB entry to match the Enstore entry, execute the following substituting in a valid *<username>* and *<password>*:

```
$ ssh sam@fcdfsam2
```

```
$ source setups.sh
```

```
$ setup oracle_instant_client
```

```
$ setup oracle_tnsnames
```

```
$ sqlplus -s <username>/<password>@cdfopfpr2 \  
@correct_file_size_and_CRC
```

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- Instructions for dealing with the files themselves are available in other HowTo files:
 - `retire_files.pdf`
 - `mark_files_bad.pdf`
 - `delete_files.pdf`
- Done!